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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,958	01/29/2004	Hiroshi Takeuchi	MIT-024-USA-P	2329

27955 7590 06/30/2005

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EXAMINER
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REESE, DAVID C

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/765,958

Applicant(s)

TAKEUCHI, HIROSHI

Examiner

David C. Reese

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment: 4/11/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

This office action is in response to Applicant's amendment filed 4/11/2005.

#### ***Status of Claims***

- [1] Claims 1-13 are pending.

#### ***Specification***

- [2] The abstract of the disclosure is objected to because the length of the abstract is too long, as it should be limited to within a range of 50 to 150 words. Please read below. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 112***

- [3] Applicant has addressed all rejections under 35 USC § 112 to the Claims in the amendment filed 4/11/2005. Accordingly, the Examiner has withdrawn the 35 USC § 112 rejections.

*Claim Rejections - 35 USC § 103*

[4] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[5] Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over TORAN U5PN4785487 in view of SHIRAI U5PN5377369.

Although the invention is not identically disclosed or described as set forth 35 U.S.C. 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a designer having ordinary skill in the art to which said subject matter pertains, the invention is not patentable.

As to claim 1, TORAN discloses a bendable bottom member of a bed comprising a plurality of side by side bars 8 bendably connected with each other to allow the whole extent of the connected bars to be curved, said bars being disposed generally perpendicular to the longitudinal axis of the bed, one of every adjacent two of the bars is provided with a plurality of longitudinal connecting protrusions being generally perpendicular to the longitudinal axis of the bed, while a plurality of recesses are formed in adjacent bars for accepting protrusions extending from an adjacent bar, in such a manner that the connecting protrusions of the bars can be inserted into corresponding recesses of an adjacent bar said protrusions having at tips and bases thereof

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first and second beveled portions, respectively, forming clearances between the protrusions and corresponding recesses to allow the connecting bars to be bent in one direction and

disengagement preventing means 35 formed at a tip of some of the connecting protrusions.

FIGURE A better shows the cited structures of TORAN and is depicted below. While TORAN

discloses side by side bars 8, they fail to show the ability to be shortened and extended; while

TORAN discloses disengagement preventing means 35, they fail to show disengagement

preventing means comprising hooks formed at a tip of some of the connecting protrusions; while

TORAN discloses corresponding accepting recesses, they fail to show corresponding accepting

recesses having steps therein adapted to engage the hooks, so that the hooks and steps are

engaged with each other when the respective adjacent bars are kept furthest away from each

other; as recited in the claims. SHIRAI teaches a bottom structure of a bed similar to that of

TORAN. In addition, SHIRAI further teaches the ability of the bars 8 to be shortened and

extended (Fig.4), disengagement preventing means comprising hooks 1 1/14 formed at a tip of

some of the connecting protrusions 9, and corresponding accepting recesses 13 having steps

therein adapted to engage the hooks 1 1/14, so that the hooks 1 1/14 and steps are engaged with

each other when the respective adjacent bars are kept furthest away from each other (Fig.4). It

would have been obvious to one of ordinary skill in the art, having the teachings of TORAN and

SHIRAI before him at the time the invention was made, to modify the protrusions and recesses

disclosed by TORAN to include the hooks and steps, respectively, of SHIRAI, in order to obtain

a bottom bed member having side by side bars that are engaged through projections and recesses

wherein the hinge between the bars comprises of hooks on the protrusions and steps on the

recesses that engage when the length of the distance between the bars is fully extended. The

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combination will replace the pin retaining members 35 of TORAN and will modify the ends of the bars 8 of TORAN to have the slotted ends 13 and hook retaining members 9 of SHIRAI.

One would have been motivated to make such a combination because the overall length of the bottom could be adjusted in the longitudinal direction, as taught by SHIRAI (Col.4, 1n.40-45).

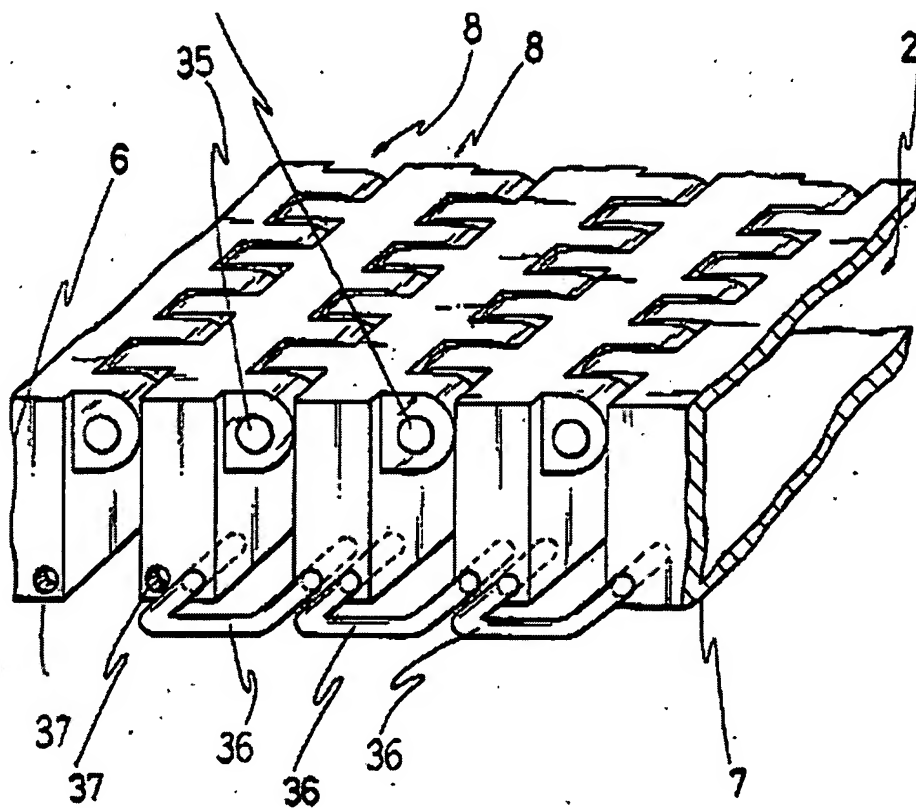


Figure A

As to claim 2, TORAN discloses a bar 7 (Fig.11) disposed at an end of the bendable bottom member 8/8/...on one side has only accepting recesses.

As to claim 3, TORAN discloses first beveled portions are formed on lower sides at the tips of the connecting protrusions while second beveled portions are formed on the upper sides at the bases of protrusions, to use the bendable bottom member as a bendable portion between the back region and the waist region. See FIGURE A above.

As to claim 4, TORAN discloses first beveled portions are formed on the upper sides at tips of connecting protrusions, while second beveled portions are formed on lower sides at the bases of protrusions, to use the bendable bottom member as a bendable portion between the waist region and the leg region. See FIGURE A above, but reverse the labels of first and second beveled portions. Claims 3 and 4 are not interdependent and so the alternative interpretations are valid.

As to claim 5, TORAN discloses the second beveled portions at the bases of the connecting protrusions are inclined in adaptation to the desired bending angles with the adjacent bars. See FIGURE A above.

As to claim 6, SHIRAI discloses hooks 11 formed at tips of connecting protrusions 9 are provided with the disengagement preventing means 13 while steps (front abutments of 13) to be engaged with the hooks are formed in the corresponding accepting recesses 13, to allow the bottom bed member to change in length as desired. Refer to claim 1 above.

As to claim 7, TORAN discloses second beveled portions at bases of connecting protrusions are inclined in adaptation to desired bending angles with adjacent bars.

As to claim 8, TORAN discloses second beveled portions at bases of connecting protrusions are inclined in adaptation to desired bending angles with adjacent bars.

As to claim 9, TORAN discloses second beveled portions at bases of connecting protrusions are inclined in adaptation to desired bending angles with adjacent bars.

As to claim 10, SHIRAI discloses hooks  $1\frac{1}{14}$  at tips of the connecting protrusions 9 are adapted to engage with steps formed in the corresponding accepting recesses 13. Refer to claim 1 above.

As to claim 11, SHIRAI discloses hooks  $1\frac{1}{14}$  at tips of the connecting protrusions 9 are adapted to engage with steps formed in the corresponding accepting recesses 13. Refer to claim 1 above.

As to claim 12, SHIRAI discloses hooks  $1\frac{1}{14}$  at tips of the connecting protrusions 9 are adapted to engage with steps formed in the corresponding accepting recesses 13. Refer to claim 1 above.

As to claim 13, SHIRAI discloses hooks  $1\frac{1}{14}$  at tips of the connecting protrusions 9 are adapted to engage with steps formed in the corresponding accepting recesses 13. Refer to claim 1 above.

### ***Response to Arguments***

[6] Applicant's arguments filed 4/11/2005 regarding rejections under 35 U.S.C. 103 have been fully considered but they are not persuasive.

To begin, the applicants initial argument concerns the use of Toran as a primary reference because the applicant feels it completely fails to either disclose or recognize the importance of certain features as listed in the claims. In response to Applicant's arguments that the purpose or operation of various structural aspects from Toran are different than that of the instant invention,



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it is important to point out that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Thus, in the instant case, the fact remains that such features from TORAN maintain (in the broadest reasonable interpretation possible *In re Pearson*, 181 USPQ 641 (CCPA 1974) the structural limitations as claimed and fulfill the claimed structure of “disengagement preventing means” because they maintain the capacity to do such an act. And also, since the above is considered a variety of disengagement means, the motivation for such a combination with another similar invention (SHIRAI) is thus warranted; one in which provides an disengagement means (SHIRAI) teaching and emulating that of the instant invention.

Continuing, the applicant argues that the construction of SHIRAI is quite different from that now called for in the claims of the present application. In response to Applicant’s argument that SHIRAI does not include certain features of Applicant’s invention, the limitations on which the applicant relies (“side by side bars can be adjusted in their intervals and can be rotated in one direction up to a predetermined angle”) are not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable.

*Constant v. Advanced Micro-Devices Inc.*, 7 USPQ2d 1064.

Continuing, the applicant argues against the combination of TORAN with SHIRAI. In response to Applicant’s argument, it has been held that the test for obviousness is not whether the features of one reference may be bodily incorporated into the other to produce the claimed subject matter but simply what the combination of references makes obvious to one of ordinary skill in the pertinent art. *In re Bozek*, 163 USPQ 545 (CCPA 1969). Also, it is not required that

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the prior art disclose or suggest the properties newly-discovered by an applicant in order for there to be a prima facie case of obviousness. See *In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897, 1905 (Fed. Cir. 1990). Moreover, as long as some motivation or suggestion to combine the references is provided by the prior art taken as a whole, the law does not require that the references be combined for the reasons contemplated by the inventor. See *In re Beattie*, 974 F.2d 1309, 24 USPQ2d 1040 (Fed. Cir. 1992); *In re Kronig*, 539 F.2d 1300, 190 USPQ 425 (CCPA 1976) and *In re Wilder*, 429 F.2d 447, 166 USPQ 545 (CCPA 1970). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. *In re Keller*, 642 F. 2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In this regard, a conclusion of obviousness may be based on common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209

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(CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. In re Bozek, 163 USPQ 545 (CCPA) 1969. In this case, there is indeed a reason to combine, because first, TORAN and SHIRAI are indeed similar to one another as it has been held that the determination that a reference is from a nonanalogous art is twofold. First, we decide if the reference is within the field of the inventor's endeavor. If it is not, we proceed to determine whether the reference is reasonably pertinent to the particular problem with which the inventor was involved. In re Wood, 202 USPQ 171, 174. In this case, both TORAN and SHIRAI teach and disclose of adjustable beds with movable bottom structures, this in turn can, and is, considered within the field of the inventor's endeavor as well as their own. Since it has been justified that TORAN and SHIRAI are similar to one another as to provide for a proper combination, the motivation once again, providing for the overall length of the bottom to be adjusted in the longitudinal direction, as taught by SHIRAI (Col.4, 1n.40-45).

Lastly, the applicant states that the secondary reference of Shirai does not disclose that one of the structures disclosed therein can be shortened or extended. Since in the claims, it is just stated that the structure, "to be shortened and extended." SHIRAI does indeed meet this structure as viewed once again in Fig. 4, as they have the capacity "to be shortened and extended." Structural limitations, not functional language, are what are patentably distinct between inventions. Consider adding additional structure to account for the exact function that such structure provides.

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**Conclusion**

[7] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

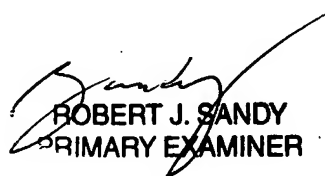
[8] Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Reese whose telephone number is (571) 272- 7082. The examiner can normally be reached on 7:30 am - 6:00 pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (571) 272-7075. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sincerely,  
David Reese  
Assistant Examiner  
Art Unit 3677

DCR

  
ROBERT J. SANDY  
PRIMARY EXAMINER